TYPICAL PLANT LAYOUTS APPENDIX D

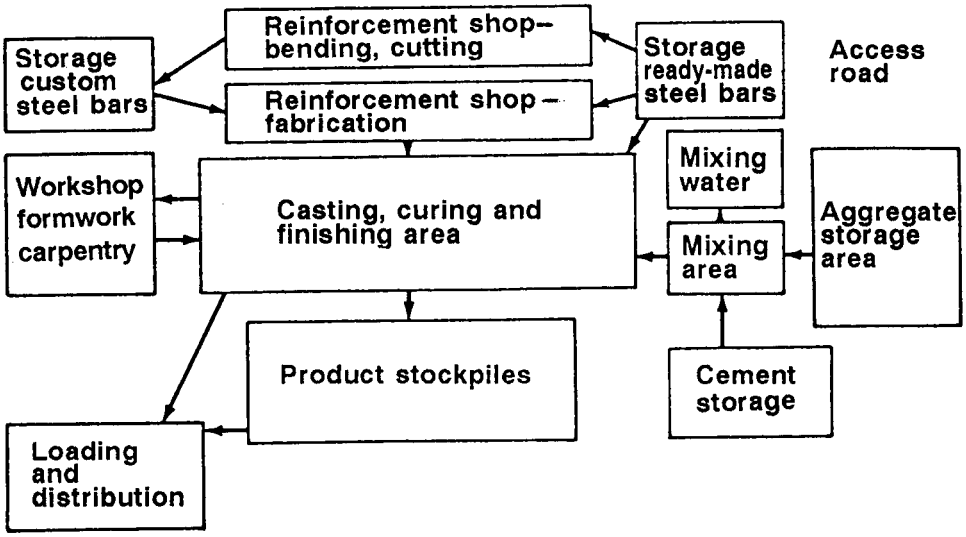

Figure D-1. Layout of precast-concrete yard

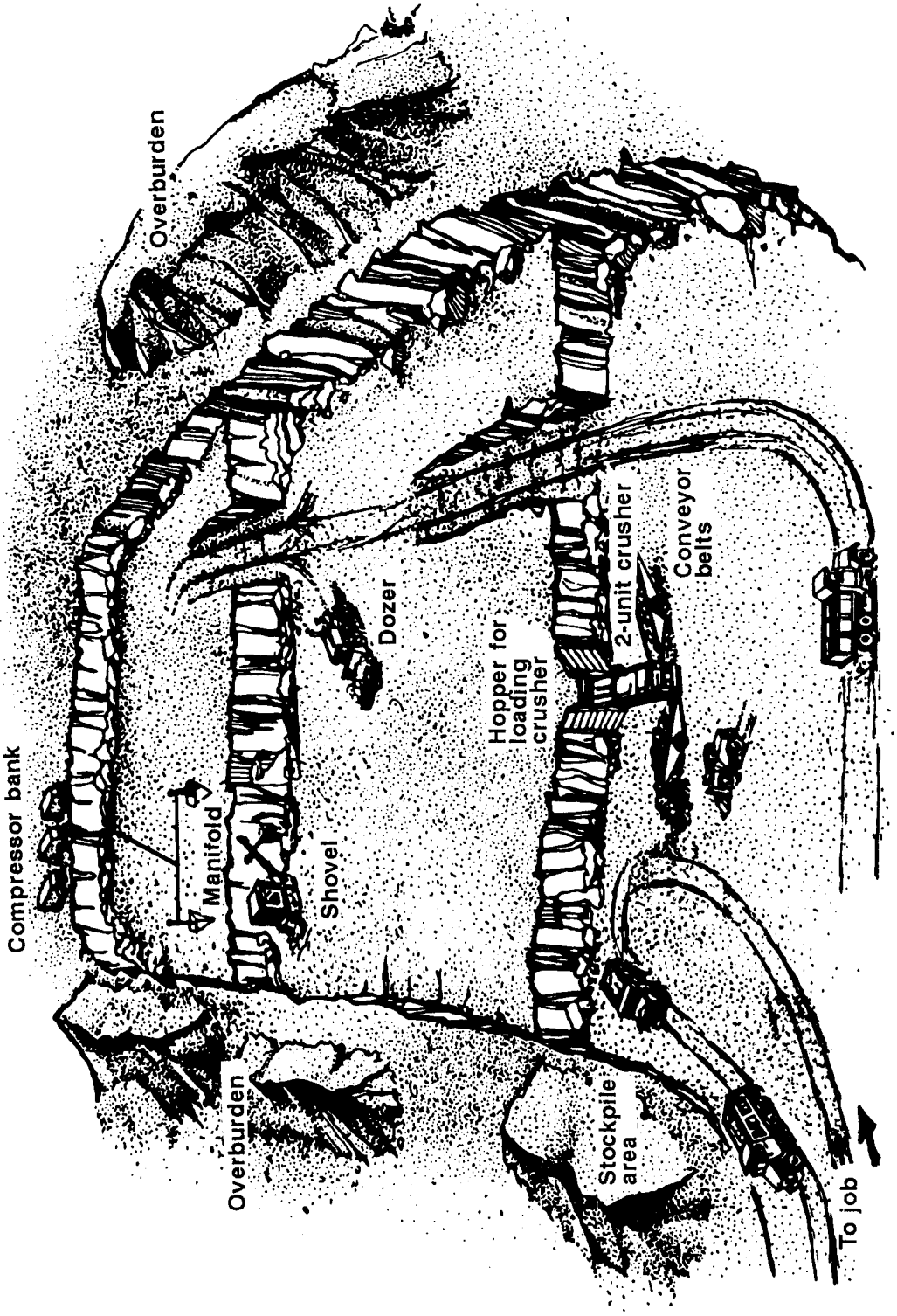

Figure D-2. Layout of quarry

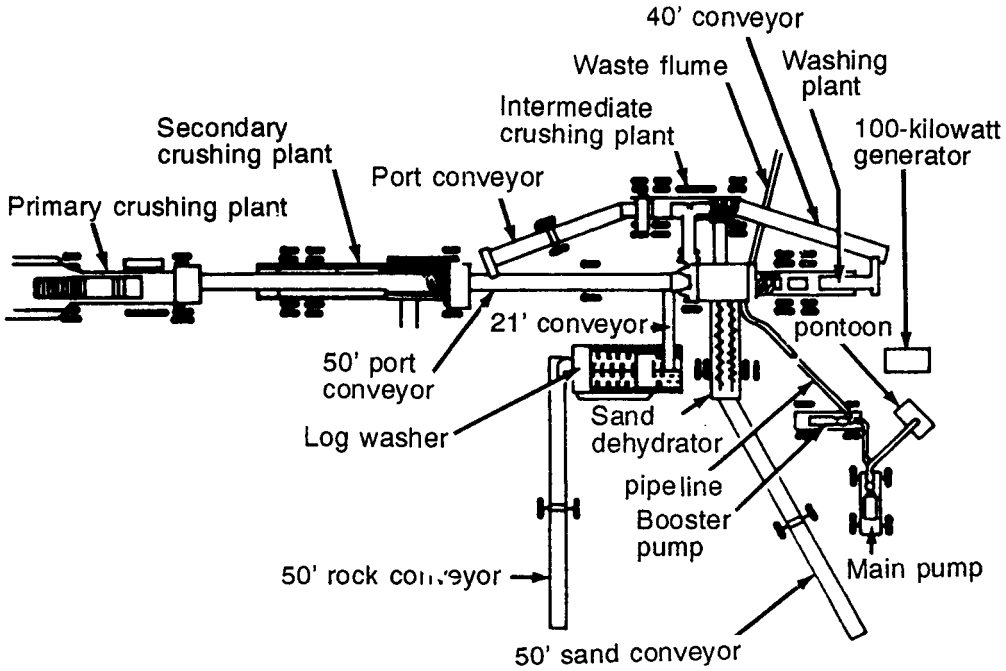

Figure D-3. Layout of rock-crushing and screening plant

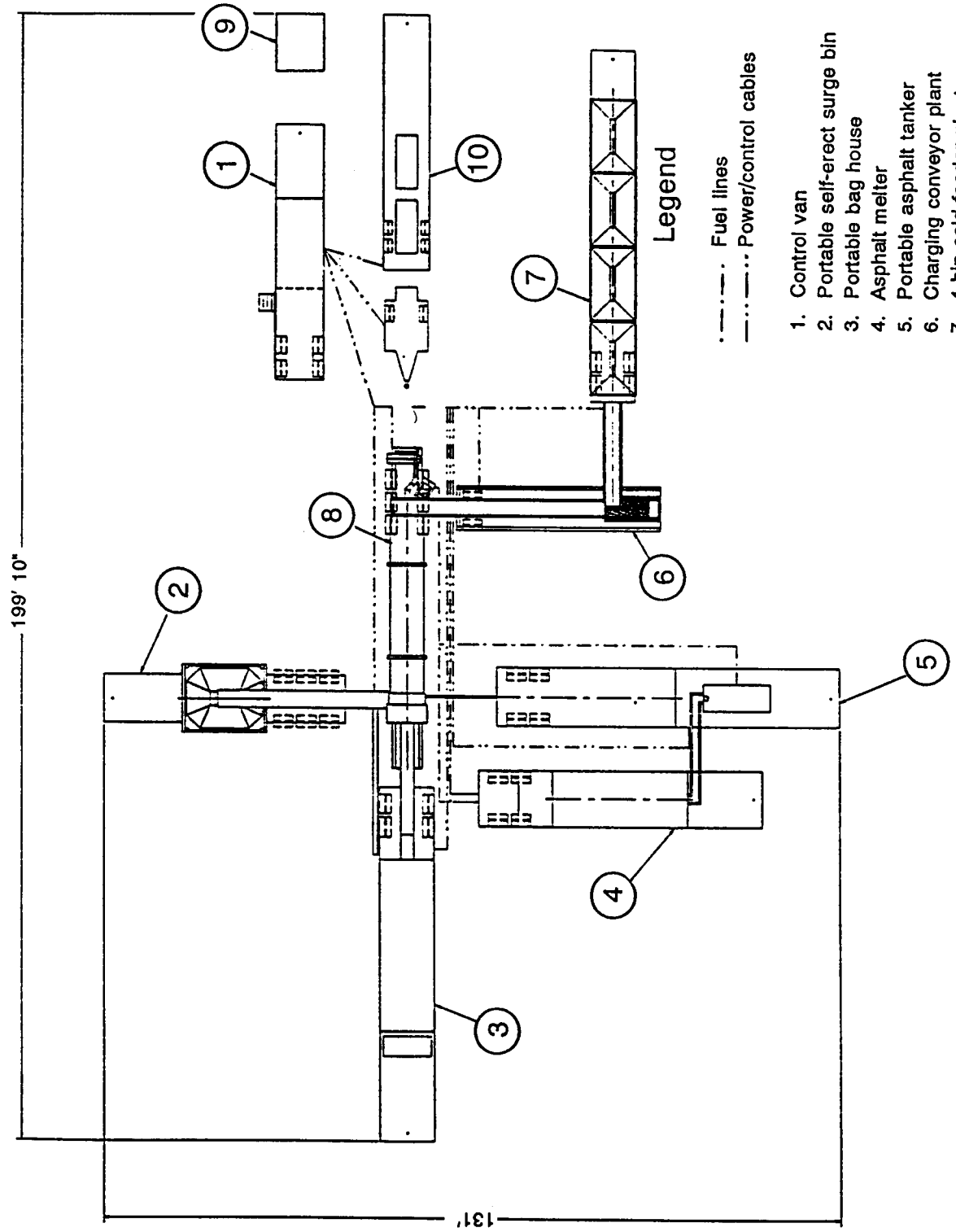

Figure D-4. Layout of central mix plant for asphaltic concrete

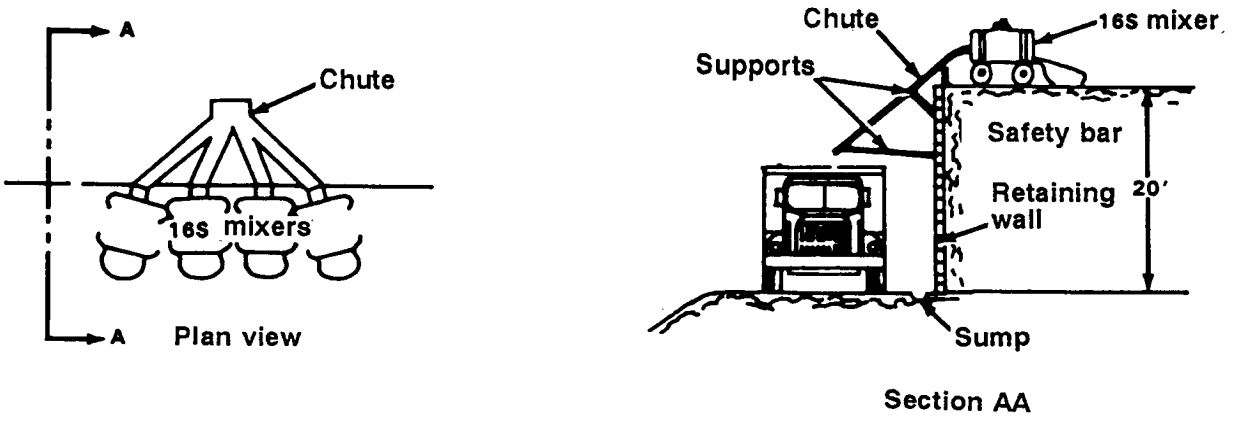

Figure D-5. Layout of central mix plants for portland cement concrete

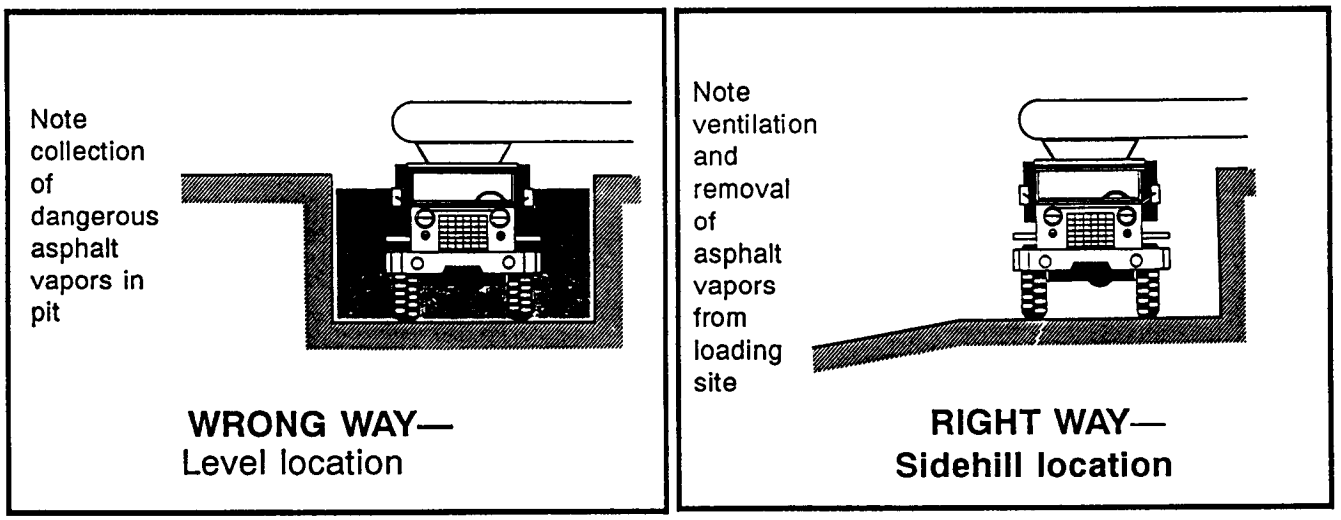

Figure D-6. Proper asphalt plant location to avoid explosion hazard

Table D-1. Asphalt plant operation

Work element description	Unit	Man-hours/unit
Set up and dismantle plant	ea	560
Operation of asphalt plant	1,000 tons	80
Hauling asphalt to job	1,000 ton mile	48

Suggested crew size:
Setup and dismantle plant: 4 operators, 1 electrician, and 1 mechanic.
Hauling asphalt to job site: 5 operators required, dependent upon scope of job.
Maintenance (support): 2 utilities workers, 1 electrician, and 1 mechanic.

NOTES:
1. Figures are based on BLH 5,000 (125-tons per hour) batch plant.
2. Site preparation and concrete curing time not included in table.

Table D-2. Rock-crushing plant operation

Work element description	Units	Man-hours/unit
Set up and dismantle	ea	320
Operating crushing plant	1,000 cu yd	160
Stockpiling crushed material	1,000 cu yd	24
Hauling crushed material to job	1,000 cu yd	48

Suggested crew size:
Setup and dismantle plant: 7 operators, 1 mechanic, and 1 electrician.
Operating crushing plant: 2 operators.
Stockpiling crushed material: 4 operators.
Maintenance (support): 1 mechanic and 1 electrician.

NOTES:
1. The production figure is based upon a 75-tons per hour plant operating at 50 percent of rated capacity crushing granite at 3,000 pounds per cubic yard. For plants of other sizes, use 50 percent of rated capacity and the size of your crew for calculations.
2. Production figures may have to be adjusted according to the type of material being processed, and with other varying circumstances. For example, coral weighs (approximately) 2,000 pounds per loose cubic yard.